

Name _____ Section _____

Solve each proportion using cross products.

1. $\frac{3}{5} = \frac{x}{15}$

2. $\frac{20-x}{x} = \frac{6}{4}$

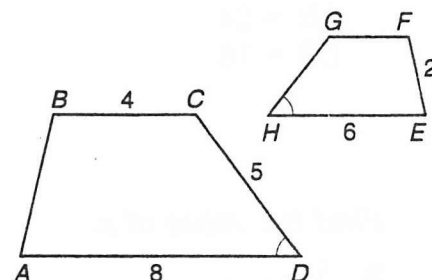
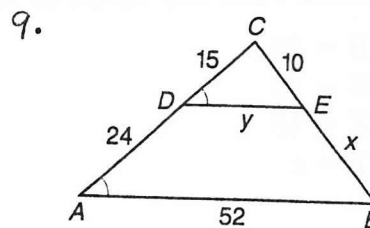
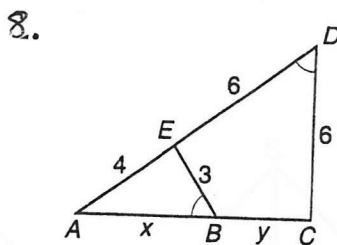
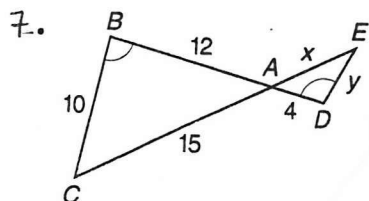
In the figure at the right, quadrilateral ABCD is similar to quadrilateral EFGH.

3. Write four equal ratios to show corresponding sides are proportional.

4. Find AB.

5. Find HG.

6. Find FG.

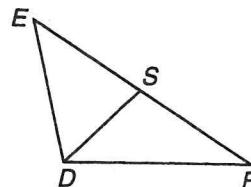
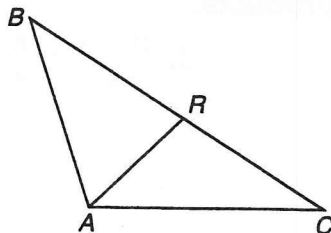
**Identify the similar triangles in each figure. Explain why they are similar and use the given information to find x and y .**

Practice

Student Edition
Pages 370-377**Parts of Similar Triangles**

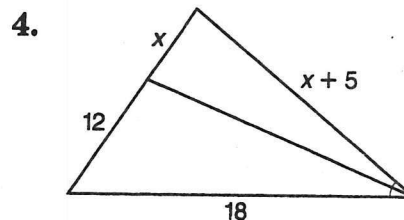
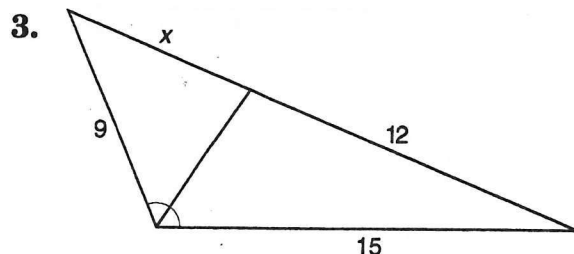
In the figure at the right, $\triangle ABC \sim \triangle DEF$, $\overline{BR} \cong \overline{RC}$, and $\overline{ES} \cong \overline{SF}$. Find the value of x .

1. $BC = 24$
 $EF = 15$
 $AR = x$
 $DS = x - 6$



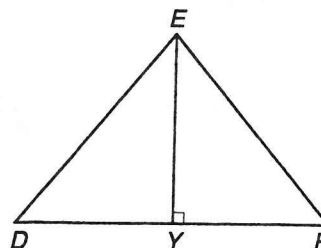
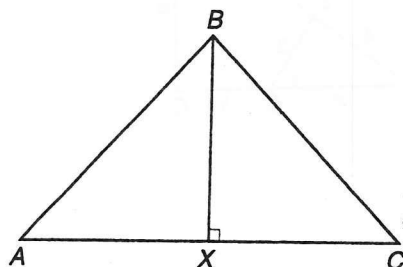
2. $AB = 2x + 5$
 $DE = x + 7$
 $AR = 24$
 $DS = 18$

Find the value of x .



In the figure at the right, $\triangle ABC \sim \triangle DEF$, and \overline{BX} and \overline{EY} are altitudes. Find the value of x .

5. $AB = 25$
 $DE = 16$
 $BX = 18$
 $EY = x$



6. $AB = 30$
 $DE = 25$
 $BX = 2x + 5$
 $EY = x + 10$